

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/585,554
Source: IPWP
Date Processed by STIC: 7/19/06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 07/19/2006

PATENT APPLICATION: US/10/585,554

TIME: 08:27:34

Input Set : A:\12136.0003USWO-Sequence Listing.txt

Output Set: N:\CRF4\07192006\J585554.raw

3 <110> APPLICANT: Idaho Research Foundation, Inc.
 5 <120> TITLE OF INVENTION: METHODS FOR REDUCING SOMATIC CELL COUNT IN MILK
 7 <130> FILE REFERENCE: 12136.0003USWO
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/585,554
 10 <141> CURRENT FILING DATE: 2006-07-06
 12 <150> PRIOR APPLICATION NUMBER: PCT/US2005/000482
 13 <151> PRIOR FILING DATE: 2005-01-07
 15 <150> PRIOR APPLICATION NUMBER: US 60/535,454
 16 <151> PRIOR FILING DATE: 2004-01-08
 18 <160> NUMBER OF SEQ ID NOS: 19
 20 <170> SOFTWARE: PatentIn version 3.3
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 18
 24 <212> TYPE: PRT
 25 <213> ORGANISM: Staphylococcus aureus
 27 <400> SEQUENCE: 1
 29 Cys Tyr Phe Ser Ser Lys Asp Asn Val Gly Lys Val Thr Gly Gly Lys
 30 1 5 10 15
 33 Thr Cys
 37 <210> SEQ ID NO: 2
 38 <211> LENGTH: 54
 39 <212> TYPE: DNA
 40 <213> ORGANISM: Staphylococcus aureus
 42 <400> SEQUENCE: 2
 43 tgctattttt catccaaaga taatgtaggt aaagttacag gtggcaaaac ttgt 54
 46 <210> SEQ ID NO: 3
 47 <211> LENGTH: 14
 48 <212> TYPE: PRT
 49 <213> ORGANISM: Artificial
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: Synthetic
 54 <400> SEQUENCE: 3
 56 Cys Tyr Phe Ser Ser Lys Asp Asn Ala Gly Gly Lys Thr Cys
 57 1 5 10
 60 <210> SEQ ID NO: 4
 61 <211> LENGTH: 42
 62 <212> TYPE: DNA
 63 <213> ORGANISM: Artificial
 65 <220> FEATURE:
 66 <223> OTHER INFORMATION: Synthetic
 68 <400> SEQUENCE: 4
 69 tgctattttt catccaaaga taatgcaggt ggcaaaactt gt 42
 72 <210> SEQ ID NO: 5

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Input Set : A:\12136.0003USWO-Sequence Listing.txt

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73 <211> LENGTH: 9
74 <212> TYPE: PRT
75 <213> ORGANISM: Artificial
77 <220> FEATURE:
78 <223> OTHER INFORMATION: Synthetic
80 <400> SEQUENCE: 5
82 Cys Tyr Phe Ser Ser Gly Lys Thr Cys
83 1 5
86 <210> SEQ ID NO: 6
87 <211> LENGTH: 27
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial
91 <220> FEATURE:
92 <223> OTHER INFORMATION: Synthetic
94 <400> SEQUENCE: 6
95 tgctattttt catccggcaa aacttgt 27
98 <210> SEQ ID NO: 7
99 <211> LENGTH: 6
100 <212> TYPE: PRT
101 <213> ORGANISM: Artificial
103 <220> FEATURE:
104 <223> OTHER INFORMATION: Synthetic
106 <400> SEQUENCE: 7
108 Cys Cys Gly Lys Thr Cys
109 1 5
112 <210> SEQ ID NO: 8
113 <211> LENGTH: 18
114 <212> TYPE: DNA
115 <213> ORGANISM: Artificial
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Synthetic
120 <400> SEQUENCE: 8
121 tgctgtggca aaacttgt 18
124 <210> SEQ ID NO: 9
125 <211> LENGTH: 240
126 <212> TYPE: PRT
127 <213> ORGANISM: Staphylococcus aureus
130 <220> FEATURE:
131 <221> NAME/KEY: misc_feature
132 <222> LOCATION: (240)..(240)
133 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
135 <400> SEQUENCE: 9
137 Glu Ser Gln Pro Asp Pro Thr Pro Asp Glu Leu His Lys Ala Ser Lys
138 1 5 10 15
141 Phe Thr Gly Leu Met Glu Asn Met Lys Val Leu Tyr Asp Asp His Tyr
142 20 25 30
145 Val Ser Ala Thr Lys Val Lys Ser Val Asp Lys Phe Leu Ala His Asp
146 35 40 45
149 Leu Ile Tyr Asn Ile Ser Asp Lys Lys Leu Lys Asn Tyr Asp Lys Val

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150      50      55      60
153 Lys Thr Glu Leu Leu Asn Glu Gly Leu Ala Lys Lys Tyr Lys Asp Glu
154 65      70      75      80
157 Val Val Asp Val Tyr Gly Ser Asn Tyr Tyr Val Asn Cys Tyr Phe Ser
158      85      90      95
161 Ser Lys Asp Asn Val Gly Lys Val Thr Gly Gly Lys Thr Cys Met Tyr
162      100      105      110
165 Gly Gly Ile Thr Lys His Glu Gly Asn His Phe Asp Asn Gly Asn Leu
166      115      120      125
169 Gln Asn Val Leu Ile Arg Val Tyr Glu Asn Lys Arg Asn Thr Ile Ser
170      130      135      140
173 Phe Glu Val Gln Thr Asp Lys Lys Ser Val Thr Ala Gln Glu Leu Asp
174 145      150      155      160
177 Ile Lys Ala Arg Asn Phe Leu Ile Asn Lys Lys Asn Leu Tyr Glu Phe
178      165      170      175
181 Asn Ser Ser Pro Tyr Glu Thr Gly Tyr Ile Lys Phe Ile Glu Asn Asn
182      180      185      190
185 Gly Asn Thr Phe Trp Tyr Asp Met Met Pro Ala Pro Gly Asp Lys Phe
186      195      200      205
189 Asp Gln Ser Lys Tyr Leu Met Met Tyr Asn Asp Asn Lys Thr Val Asp
190      210      215      220
W--> 193 Ser Lys Ser Val Lys Ile Glu Val His Leu Thr Thr Lys Asn Gly Xaa
194 225      230      235      240
197 <210> SEQ ID NO: 10
198 <211> LENGTH: 240
199 <212> TYPE: PRT
200 <213> ORGANISM: Staphylococcus aureus
203 <220> FEATURE:
204 <221> NAME/KEY: misc_feature
205 <222> LOCATION: (240)..(240)
206 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
208 <400> SEQUENCE: 10
210 Glu Ser Gln Pro Asp Pro Thr Pro Asp Glu Leu His Lys Ser Ser Glu
211 1      5      10      15
214 Phe Thr Gly Thr Met Gly Asn Met Lys Tyr Leu Tyr Asp Asp His Tyr
215      20      25      30
218 Val Ser Ala Thr Lys Val Met Ser Val Asp Lys Phe Leu Ala His Asp
219      35      40      45
222 Leu Ile Tyr Asn Ile Ser Asp Lys Lys Leu Lys Asn Tyr Asp Lys Val
223      50      55      60
226 Lys Thr Glu Leu Leu Asn Glu Asp Leu Ala Lys Lys Tyr Lys Asp Glu
227 65      70      75      80
230 Val Val Asp Val Tyr Gly Ser Asn Tyr Tyr Val Asn Cys Tyr Phe Ser
231      85      90      95
234 Ser Lys Asp Asn Val Gly Lys Val Thr Gly Gly Lys Thr Cys Met Tyr
235      100      105      110
238 Gly Gly Ile Thr Lys His Glu Gly Asn His Phe Asp Asn Gly Asn Leu
239      115      120      125
242 Gln Asn Val Leu Ile Arg Val Tyr Glu Asn Lys Arg Asn Thr Ile Ser

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243      130      135      140
246 Phe Glu Val Gln Thr Asp Lys Lys Ser Val Thr Ala Gln Glu Leu Asp
247 145      150      155      160
250 Ile Lys Ala Arg Asn Phe Leu Ile Asn Lys Lys Asn Leu Tyr Glu Phe
251      165      170      175
254 Asn Ser Ser Pro Tyr Glu Thr Gly Tyr Ile Lys Phe Ile Glu Asn Asn
255      180      185      190
258 Gly Asn Thr Phe Gln Tyr Asp Met Met Pro Ala Pro Gly Asp Lys Phe
259      195      200      205
262 Asp Gln Ser Lys Tyr Leu Met Met Tyr Asn Asp Asn Lys Thr Val Asp
263      210      215      220
W--> 266 Ser Lys Ser Val Lys Ile Glu Val His Leu Thr Thr Lys Asn Gly Xaa
267 225      230      235      240
270 <210> SEQ ID NO: 11
271 <211> LENGTH: 240
272 <212> TYPE: PRT
273 <213> ORGANISM: Staphylococcus aureus
276 <220> FEATURE:
277 <221> NAME/KEY: misc_feature
278 <222> LOCATION: (240)..(240)
279 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
281 <400> SEQUENCE: 11
283 Glu Ser Gln Pro Asp Pro Met Pro Asp Asp Leu His Lys Ser Ser Glu
284 1      5      10      15
287 Phe Thr Gly Thr Met Gly Asn Met Lys Tyr Leu Tyr Asp Asp His Tyr
288      20      25      30
291 Val Ser Ala Thr Lys Val Lys Ser Val Asp Lys Phe Leu Ala His Asp
292      35      40      45
295 Leu Ile Tyr Asn Ile Ser Asp Lys Lys Leu Lys Asn Tyr Asp Lys Val
296      50      55      60
299 Lys Thr Glu Leu Leu Asn Glu Asp Leu Ala Lys Lys Tyr Lys Asp Glu
300 65      70      75      80
303 Val Val Asp Val Tyr Gly Ser Asn Tyr Tyr Val Asn Cys Tyr Phe Ser
304      85      90      95
307 Ser Lys Asp Asn Val Gly Lys Val Thr Gly Gly Lys Thr Cys Met Tyr
308      100      105      110
311 Gly Gly Ile Thr Lys His Glu Gly Asn His Phe Asp Asn Gly Asn Leu
312      115      120      125
315 Gln Asn Val Leu Val Arg Val Tyr Glu Asn Lys Arg Asn Thr Ile Ser
316      130      135      140
319 Phe Glu Val Gln Thr Asp Lys Lys Ser Val Thr Ala Gln Glu Leu Asp
320 145      150      155      160
323 Ile Lys Ala Arg Asn Phe Leu Ile Asn Lys Lys Asn Leu Tyr Glu Phe
324      165      170      175
327 Asn Ser Ser Pro Tyr Glu Thr Gly Tyr Ile Lys Phe Ile Glu Asn Asn
328      180      185      190
331 Gly Asn Thr Phe Gln Tyr Asp Met Met Pro Ala Pro Gly Asp Lys Phe
332      195      200      205
335 Asp Gln Ser Lys Tyr Leu Met Met Tyr Asn Asp Asn Lys Thr Val Asp

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336      210      215      220
W--> 339 Ser Lys Ser Val Lys Ile Glu Val His Leu Thr Thr Lys Asn Gly Xaa
340 225      230      235      240
343 <210> SEQ ID NO: 12
344 <211> LENGTH: 240
345 <212> TYPE: PRT
346 <213> ORGANISM: Staphylococcus aureus
349 <220> FEATURE:
350 <221> NAME/KEY: misc_feature
351 <222> LOCATION: (240)..(240)
352 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
354 <400> SEQUENCE: 12
356 Glu Ser Gln Pro Asp Pro Met Pro Asp Asp Leu His Lys Ser Ser Glu
357 1      5      10      15
360 Phe Thr Gly Thr Met Gly Asn Met Lys Tyr Leu Tyr Asp Asp His Tyr
361      20      25      30
364 Val Ser Ala Thr Lys Val Lys Ser Val Asp Lys Phe Leu Ala His Asp
365      35      40      45
368 Leu Ile Tyr Asn Ile Asn Asp Lys Lys Leu Asn Asn Tyr Asp Lys Val
369      50      55      60
372 Lys Thr Glu Leu Leu Asn Glu Asp Leu Ala Asn Lys Tyr Lys Asp Glu
373 65      70      75      80
376 Val Val Asp Val Tyr Gly Ser Asn Tyr Tyr Val Asn Cys Tyr Phe Ser
377      85      90      95
380 Ser Lys Asp Asn Val Gly Lys Val Thr Ser Gly Lys Thr Cys Met Tyr
381      100     105     110
384 Gly Gly Ile Thr Lys His Glu Gly Asn His Phe Asp Asn Gly Asn Leu
385      115     120     125
388 Gln Asn Val Leu Ile Arg Val Tyr Glu Asn Lys Arg Asn Thr Ile Ser
389      130     135     140
392 Phe Glu Val Gln Thr Asp Lys Lys Ser Val Thr Ala Gln Glu Leu Asp
393 145     150     155     160
396 Ile Lys Ala Arg Asn Phe Leu Ile Asn Lys Lys Asn Leu Tyr Glu Phe
397      165     170     175
400 Asn Ser Ser Pro Tyr Glu Thr Gly Tyr Ile Lys Phe Ile Glu Ser Asn
401      180     185     190
404 Gly Asn Thr Phe Trp Tyr Asp Met Met Pro Ala Pro Gly Asp Lys Phe
405      195     200     205
408 Asp Gln Ser Lys Tyr Leu Met Ile Tyr Lys Asp Asn Lys Met Val Asp
409      210     215     220
W--> 412 Ser Lys Ser Val Lys Ile Glu Val His Leu Thr Thr Lys Asn Gly Xaa
413 225      230      235      240
416 <210> SEQ ID NO: 13
417 <211> LENGTH: 240
418 <212> TYPE: PRT
419 <213> ORGANISM: Staphylococcus aureus
422 <220> FEATURE:
423 <221> NAME/KEY: misc_feature
424 <222> LOCATION: (240)..(240)

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/585,554

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; Xaa Pos. 240
Seq#:10; Xaa Pos. 240
Seq#:11; Xaa Pos. 240
Seq#:12; Xaa Pos. 240
Seq#:13; Xaa Pos. 240
Seq#:14; Xaa Pos. 240
Seq#:15; Xaa Pos. 240
Seq#:16; Xaa Pos. 240
Seq#:17; Xaa Pos. 228
Seq#:18; Xaa Pos. 231
Seq#:19; Xaa Pos. 236

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7,8,17,18,19

VERIFICATION SUMMARY

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DATE: 07/19/2006

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Input Set : A:\12136.0003USWO-Sequence Listing.txt

Output Set: N:\CRF4\07192006\J585554.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number
L:193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:224
L:266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:224
L:339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:224
L:412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:224
L:485 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:224
L:558 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:224
L:631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:224
L:704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:224
L:780 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:224
L:856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:224
L:932 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:224